

Abstract

A rapid screening, threshold, and diagnostic tests for evaluation of hearing includes techniques that are particularly suited for rapid objective hearing screening and evaluation of newborns or other patients who are unable or unwilling to provide reliable subjective responses. The hearing tests may be frequency specific or may evaluate overall hearing ability without special focus on frequency-specific loss. The tests involve the use of novel stimuli, signal processing, signal analysis, and statistical techniques, including the use of ramped stimuli and evaluating the changes that these stimuli evoke in the individual's brain activity at different moments in time.